AUTHOR INDEX TO VOLUME 45

Albanese, M., P. Bacilieri, S. Cabasino, N. Cabibbo, F. Costantini, G. Fiorentini, F. Flore, L. Fonti, A. Fucci, M.P. Lombardo, S. Galeotti, P. Giacomelli, P. Marchesini, E. Marinari, F. Marzano, A. Miotto, P. Paolucci, G. Parisi, D. Pascoli, D. Passuello, S. Petrarca, F. Rapuano, E. Remiddi, R. Rusack, G. Salina and R. Tripiccione, The APE computer: an array processor optimized for lattice gauge theory simulations 45 (1987) 345
Areti, H., see J. Biel 45 (1987) 331
Areti, H., see I. Gaines 45 (1987) 323
Aston, D., Towards a personal mainframe 45 (1987) 191
Atac, R., see J. Biel 45 (1987) 331
Atac, R., see I. Gaines 45 (1987) 323

Bacilieri, P., see M. Albanese 45 (1987) 345
Bassler, E., The graphical editor program: GEP 45 (1987) 201
Bertrand, D., The DELPHI interactive analysis and tanagra 45 (1987) 207
Biel, J., H. Areti, R. Atac, A. Cook, M. Fischler, I. Gaines, C. Kaliher, R. Hance, D. Husby, T. Nash and T. Zmuda, Software for the ACP multiprocessor system 45 (1987) 331
Biel, J., see I. Gaines 45 (1987) 323
Boano, M., see Z. Qian 45 (1987) 283
Bock, R., R. Brun, O. Couet, J.C. Marin, R. Nierhaus, L. Pape, N. Saumon, C. Vandoni and P. Zanarini, PAW – towards a physics analysis workstation 45 (1987) 181
Bock, R.K., Software issues for large detectors 45 (1987) 15
Booth, A.W. and J.T. Carroll, An expert system for FASTBUS diagnosis 45 (1987) 67
Brandt, L.E., The NSF national computing centers past, present, and future 45 (1987) 147
Brazioli, R., see Z. Qian 45 (1987) 283
Brower, R., R. Giles and G. Maturana, Development of scientific software in the LISP machine environment 45 (1987) 427
Brown, C., see J. Linnemann 45 (1987) 245
Brun, R., see R. Bock 45 (1987) 181
Bunn, J., see Z. Qian 45 (1987) 283
Burnett, T.H., IDA: an interactive data analysis environment for high energy physics 45 (1987) 195

Cabasino, S., see M. Albanese 45 (1987) 345
Cabibbo, N., see M. Albanese 45 (1987) 345
Carpenter, B.E., F. Fluckiger, J.M. Gerard, D. Lord and B. Segal, Two years of real progress in European HEP networking: a CERN perspective 45 (1987) 83
Carroll, J.T., see A.W. Booth 45 (1987) 67
Chadwick, K., R. Hollebeek and P.K. Sinervo, The organization and maintenance of the CDF offline code on IBM VM/CMS and DEC VAX/VMS operating systems 45 (1987) 409
Charity, T., R. McClatchey and J. Harvey, Use of software engineering techniques in the design of the ALEPH data acquisition system 45 (1987) 433
Clark, A., see J. Linnemann 45 (1987) 245

Cook, A., see J. Biel 45 (1987) 331
Cook, A., see I. Gaines 45 (1987) 323
Costantini, F., see M. Albanese 45 (1987) 345
Cottrell, R.L.A., Analysis of network statistics 45 (1987) 93
Couet, O., see R. Bock 45 (1987) 181
Cutts, D., see J. Linnemann 45 (1987) 245

DeClute, G., see M. Thompson 45 (1987) 403
DeKeyser, J.L., see D. Levinthal 45 (1987) 137
Delfino, M.C., Experience with the MAC data flow system 45 (1987) 467

Emiliani, V., see Z. Qian 45 (1987) 283

Fantechi, R., see Z. Qian 45 (1987) 283
Featherly, J., see J. Linnemann 45 (1987) 245
Fiorentini, G., see M. Albanese 45 (1987) 345
Fischler, M., see J. Biel 45 (1987) 331
Fischler, M., see I. Gaines 45 (1987) 323
Fisher, S.M., see Z. Qian 45 (1987) 283
Flore, F., see M. Albanese 45 (1987) 345
Fluckiger, F., see B.E. Carpenter 45 (1987) 83
Fonti, L., see M. Albanese 45 (1987) 345
Friedman, J.H., J.A. McDonald and W. Stuetzle, An introduction to real-time graphical techniques for analyzing multivariate data 45 (1987) 161
Fucci, A., see M. Albanese 45 (1987) 345

Gaines, I., see J. Biel 45 (1987) 331
Gaines, I., H. Areti, R. Atac, J. Biel, A. Cook, M. Fischler, R. Hance, D. Husby, T. Nash and T. Zmuda, The ACP multiprocessor system at Fermilab 45 (1987) 323
Galeotti, S., see M. Albanese 45 (1987) 345
Georgiopoulos, C., see D. Levinthal 45 (1987) 137
Gerard, J.M., see B.E. Carpenter 45 (1987) 83
Ghiselli, A., A DECNET/IBM gateway for 3270 remote terminal access to IBM systems from VAX nodes of a DECNET network 45 (1987) 447
Giacomelli, P., see M. Albanese 45 (1987) 345
Gibbard, B., see J. Linnemann 45 (1987) 245
Giles, R., see R. Brower 45 (1987) 427
Glendinning, I. and A. Hey, Transputer arrays as FORTRAN farms for particle physics 45 (1987) 367
Goldberg, J., see A. Moatti 45 (1987) 355
Goldman, H., see D. Levinthal 45 (1987) 137
Green, M.G., see Z. Qian 45 (1987) 283
Grosdidier, G., A VAX-FPS loosely coupled array of processors 45 (1987) 361

Hagopian, S., see J. Linnemann 45 (1987) 245
Hall, D.E., see W.E. Johnston 45 (1987) 479
Hance, R., see J. Biel 45 (1987) 331
Hance, R., see I. Gaines 45 (1987) 323
Harvey, J., see T. Charity 45 (1987) 433
Harvey, J., see Z. Qian 45 (1987) 283

Hauser, J., Vectorization of track finding and fitting algorithms for HEP 45 (1987) 121
Hey, A., see I. Glendinning 45 (1987) 367
Hodous, M.F., see D. Levinthal 45 (1987) 137
Hoftun, J., see J. Linnemann 45 (1987) 245
Hollebeek, R., see K. Chadwick 45 (1987) 409
Husby, D., see J. Biel 45 (1987) 331
Husby, D., see I. Gaines 45 (1987) 323

Ito, A., see J. Linnemann 45 (1987) 245

Johnson, A.S., FORTRAN preprocessors 45 (1987) 275
Johnstad, H. and J. Nicholls, Producing and supporting sharable software 45 (1987) 473
Johnston, W.E., D.E. Hall, F. Renema and D. Robertson, Low cost scientific video movie making 45 (1987) 479
Jonckheere, A., see J. Linnemann 45 (1987) 245

Kahn, S., see J. Linnemann 45 (1987) 245
Kaliher, C., see J. Biel 45 (1987) 331
Kellner, G., Development of software for ALEPH using structured techniques 45 (1987) 229
Klopfenstein, C., see J. Linnemann 45 (1987) 245
Kunori, S., see J. Linnemann 45 (1987) 245

Langeveld, W.G.J., Optical storage and its possible use in high-energy physics 45 (1987) 395
Lauer, R., A.J. Slaughter and E. Wolin, A role for relational databases in high energy physics software systems 45 (1987) 373
Levinthal, D., H. Goldman, C. Georgiopoulos, J.L. DeKeyser, S. Linn, S. Youssef and M.F. Hodous, Experimental HEP supercomputing at FSU 45 (1987) 137
Linn, S., see J. Linnemann 45 (1987) 245
Linn, S., see D. Levinthal 45 (1987) 137
Linnemann, J., J. Featherly, B. Gibbard, S. Kahn, S. Protopopescu, D. Cutts, J. Hoftun, C. Brown, A. Ito, A. Jonckheere, R. Raja, S. Hagopian, S. Linn, D. Zieminska, A. Zieminski, A. Clark, C. Klopfenstein, S. Loken, T. Trippe, S. Kunori, D. Buchholz, E. Gardella, Y. Ducros, A. Zylberstein, R. Engelmann, D. Hedin, K. Ng and K. Nishikawa, The use of SA/SD methods in D0 software development 45 (1987) 245
Loken, S., see J. Linnemann 45 (1987) 245
Loken, S.C., see F. Olken 45 (1987) 379
Lombardo, M.P., see M. Albanese 45 (1987) 345
Lord, D., see B.E. Carpenter 45 (1987) 83

Manzo, J., On managing large scale projects: some simple principles for developing complex systems 45 (1987) 215
Marchesini, P., see M. Albanese 45 (1987) 345
Marin, J.C., see R. Bock 45 (1987) 181
Marinari, E., see M. Albanese 45 (1987) 345
Marzano, F., see M. Albanese 45 (1987) 345
Maturana, G., see R. Brower 45 (1987) 427
Maturana, G., Static allocation in massively parallel computers 45 (1987) 319
McClatchey, R., see T. Charity 45 (1987) 433
McClatchey, R., see Z. Qian 45 (1987) 283

McCubbin, N.A., VM/CMS in the HEP community (HEPVM) 45 (1987) 61
McDonald, J.A., see J.H. Friedman 45 (1987) 161
Memmi, G., see A. Moatti 45 (1987) 355
Menasce, D. and S. Sala, The MIDA database of the E687 μstrip vertex detector 45 (1987) 385
Metcalf, M., FORTRAN 8X – the emerging standard 45 (1987) 259
Miotto, A., see M. Albanese 45 (1987) 345
Miura, K., EGS4V: vectorization of the Monte Carlo cascade shower simulation code EGS4 45 (1987) 127
Moatti, A., J. Goldberg and G. Memmi, Parallel Monte Carlo calculations with many microcomputers 45 (1987) 355
Montgomery, H.E., Status of (US) high energy physics networking 45 (1987) 77
Mount, R.P., Database systems for HEP experiments 45 (1987) 299

Nash, T., see J. Biel 45 (1987) 331
Nash, T., see I. Gaines 45 (1987) 323
Nash, T., Asilomar conference on managing complexity in high energy physics: a summary and renaming of the conference 45 (1987) 9
Newman, H.B., Computing for HEP experiments: 1987–1997 45 (1987) 27
Nicholls, J., see H. Johnstad 45 (1987) 473
Nierhaus, R., see R. Bock 45 (1987) 181

Olken, F., S.C. Loken, D. Rotem, A. Shoshani and T.G. Trippe, Data management for high energy physics experiments – preliminary proposals 45 (1987) 379

Palazzi, P., see Z. Qian 45 (1987) 283
Paolucci, P., see M. Albanese 45 (1987) 345
Pape, L., see R. Bock 45 (1987) 181
Parisi, G., see M. Albanese 45 (1987) 345
Pascoli, D., see M. Albanese 45 (1987) 345
Perotto, E., Network operating system 45 (1987) 455
Pohl, M., Data driven parallelism in experimental high energy physics applications 45 (1987) 311
Pohl, M., Multiprocessors for high energy physics 45 (1987) 47
Protopopescu, S., see J. Linnemann 45 (1987) 245
Putzer, A., see Z. Qian 45 (1987) 283

Qian, Z., S. Tang, W. Zhao, S.M. Fisher, J. Harvey, M. Boano, J. Bunn, R. McClatchey, V. Emiliani, P. Palazzi, R. Brazioli, A. Putzer, M.G. Green and R. Fantechi, Use of the ADAMO data management system within ALEPH 45 (1987) 283
Quarrie, D.R., Personal computers in high energy physics 45 (1987) 175

Raja, R., see J. Linnemann 45 (1987) 245
Renema, F., see W.E. Johnston 45 (1987) 479
Robertson, D., see W.E. Johnston 45 (1987) 479
Rotem, D., see F. Olken 45 (1987) 379
Russell, J.J., Programming languages: time for a change? 45 (1987) 269

Sala, S., see D. Menasce 45 (1987) 385
Saumon, N., see R. Bock 45 (1987) 181
Segal, B., see B.E. Carpenter 45 (1987) 83

Shoshani, A., see F. Olken 45 (1987) 379
Sinervo, P.K., see K. Chadwick 45 (1987) 409
Slaughter, A.J., see R. Lauer 45 (1987) 373
Sphicas, P.A., UA1 experience with 3081/E systems 45 (1987) 339
Stanescu, C., Standard and graphics libraries in on-line environment. A comparative study of performance 45 (1987) 475
Steuer, M.F., Monitoring of project-progress via distributed database 45 (1987) 391
Struven, W., Networking through the new phone system the future of telecommunications 45 (1987) 443
Stuetzle, W., see J.H. Friedman 45 (1987) 161

Tang, S., see Z. Qian 45 (1987) 283
Thompson, M., A. Varda and G. DeClute, Two terabyte optical archival store 45 (1987) 403
Toussaint, D., Supercomputations in QCD 45 (1987) 111
Trippe, T., see J. Linnemann 45 (1987) 245
Trippe, T.G., see F. Olken 45 (1987) 379

Van Dam, A., Solids modeling and rendering on workstations – a pictorial overview 45 (1987) 169
Vandoni, C., see R. Bock 45 (1987) 181
Varda, A., see M. Thompson 45 (1987) 403
Vialle, J.P., The U_A1 3D graphics analysis system 45 (1987) 149

Wickens, F., The computing environment. A summary of the Asilomar Conference on Computing in High Energy Physics 45 (1987) 1
Wisinski, D.E., An environment for high energy physics code development 45 (1987) 417
Wolin, E., see R. Lauer 45 (1987) 373

Youssef, S., Clustering with local equivalence relations 45 (1987) 423
Youssef, S., see D. Levinthal 45 (1987) 137

Zanarini, P., see R. Bock 45 (1987) 181
Zhao, W., see Z. Qian 45 (1987) 283
Zieminska, D., see J. Linnemann 45 (1987) 245
Zieminski, A., see J. Linnemann 45 (1987) 245
Zmuda, T., see J. Biel 45 (1987) 331
Zmuda, T., see I. Gaines 45 (1987) 323

SUBJECT INDEX TO VOLUME 45

Computational Methods

A. van Dam
Solids modeling and rendering on workstations – a pictorial overview 45 (1987) 169

A.S. Johnson
FORTRAN preprocessors 45 (1987) 275

I. Glendinning and A. Hey
Transputer arrays as FORTRAN farms for particle physics 45 (1987) 367

Elementary Particle Physics

General, high energy physics and computing

F. Wickens
The computing environment. A summary of the Asilomar Conference on Computing in High Energy Physics 45 (1987) 1

T. Nash
Asilomar conference on managing complexity in high energy physics: a summary and renaming of the conference 45 (1987) 9

R.K. Bock
Software issues for large detectors 45 (1987) 15

H.B. Newman
Computing for HEP experiments: 1987–1997 45 (1987) 27

M. Pohl
Multiprocessors for high energy physics 45 (1987) 47

N.A. McCubbin
VM/CMS in the HEP community (HEPVM) 45 (1987) 61

H.E. Montgomery
Status of (US) high energy physics networking 45 (1987) 77

B.E. Carpenter, F. Fluckiger, J.M. Gerard, D. Lord and B. Segal
Two years of real progress in European HEP networking: a CERN perspective 45 (1987) 83

R.L.A. Cottrell
Analysis of network statistics 45 (1987) 93

D. Levinthal, H. Goldman, C. Georgiopoulos, J.L. DeKeyser, S. Linn, S. Youssef and M.F. Hodous
Experimental HEP supercomputing at FSU 45 (1987) 137

L.E. Brandt
The NSF national computing centers past, present, and future 45 (1987) 147

J.P. Vialle
The U_A1 3D graphics analysis system 45 (1987) 149

D.R. Quarrie
Personal computers in high energy physics 45 (1987) 175

D. Aston
Towards a personal mainframe 45 (1987) 191

J. Manzo
On managing large scale projects: some simple principles for developing complex systems 45 (1987) 215

G. Kellner
Development of software for ALEPH using structured techniques 45 (1987) 229

J. Linnemann, J. Featherly, B. Gibbard, S. Kahn, S. Protopopescu, D. Cutts, J. Hoftun, C. Brown, A. Ito, A. Jonckheere, R. Raja, S. Hagopian, S. Linn, D. Zieminska, A. Zieminski, A. Clark, C. Klopfenstein, S. Loken, T. Trippe, S. Kunori, D. Buchholz, E. Gardella, Y. Ducros, A. Zylberstein, R. Engelmann, D. Hedin, K. Ng and K. Nishikawa
The use of SA/SD methods in D0 software development 45 (1987) 245

M. Metcalf
FORTRAN 8X – the emerging standard 45 (1987) 259

J.J. Russell
Programming languages: time for a change? 45 (1987) 269

M. Pohl
Data driven parallelism in experimental high energy physics applications 45 (1987) 311

G. Maturana
Static allocation in massively parallel computers 45 (1987) 319

P.A. Sphicas
UA1 experience with 3081/E systems 45 (1987) 339

A. Moatti, J. Goldberg and G. Memmi
Parallel Monte Carlo calculations with many microcomputers 45 (1987) 355

G. Grosdidier
A VAX-FPS loosely coupled array of processors 45 (1987) 361

W.G.J. Langeveld
Optical storage and its possible use in high-energy physics 45 (1987) 395

M. Thompson, A. Varda and G. DeClute
Two terabyte optical archival store 45 (1987) 403

K. Chadwick, R. Hollebeek and P.K. Sinervo
The organization and maintenance of the CDF offline code on IBM VM/CMS and DEC VAX/VMS operating systems 45 (1987) 409

D.E. Wisinski
An environment for high energy physics code development 45 (1987) 417

R. Brower, R. Giles and G. Maturana
Development of scientific software in the LISP machine environment 45 (1987) 427

W. Struven
Networking through the new phone system the future of telecommunications 45 (1987) 443

A. Ghiselli
A DECNET/IBM gateway for 3270 remote terminal access to IBM systems from VAX nodes of a DECNET network 45 (1987) 447

E. Perotto
Network operating system 45 (1987) 455

M.C. Delfino
Experience with the MAC data flow system 45 (1987) 467

H. Johnstad and J. Nicholls
Producing and supporting sharable software 45 (1987) 473

C. Stanescu
Standard and graphics libraries in on-line environment. A comparative study of performance 45 (1987) 475

W.E. Johnston, D.E. Hall, F. Renema and D. Robertson
Low cost scientific video movie making 45 (1987) 479

Cascade and shower simulation

K. Miura
EGS4V: vectorization of the Monte Carlo cascade shower simulation code EGS4 45 (1987) 127

Quantum chromodynamics (except event simulation)

D. Toussaint
Supercomputations in QCD 45 (1987) 111

M. Albanese, P. Bacilieri, S. Cabasino, N. Cabibbo, F. Costantini, G. Fiorentini, F. Flore, L. Fonti, A. Fucci, M.P. Lombardo, S. Galeotti, P. Giacomelli, P. Marchesini, E. Marinari, F. Marzano, A. Miotto, P. Paolucci, G. Parisi, D. Pascoli, D. Passuello, S. Petrarca, F. Rapuano, E. Remiddi, R. Rusack, G. Salina and R. Tripiccione
The APE computer: an array processor optimized for lattice gauge theory simulations 45 (1987) 345

Detector control and data acquisition

A.W. Booth and J.T. Carroll
An expert system for FASTBUS diagnosis 45 (1987) 67

D. Menasce and S. Sala
The MIDA database of the E687 μstrip vertex detector 45 (1987) 385

T. Charity, R. McClatchey and J. Harvey
Use of software engineering techniques in the design of the ALEPH data acquisition system 45 (1987) 433

Event reconstruction and data analysis (except data bases)

J. Hauser
Vectorization of track finding and fitting algorithms for HEP 45 (1987) 121

J.H. Friedman, J.A. McDonald and W. Stuetzle
An introduction to real-time graphical techniques for analyzing multivariate data 45 (1987) 161

R. Bock, R. Brun, O. Couet, J.C. Marin, R. Nierhaus, L. Pape, N. Saumon, C. Vandoni and P. Zanarini
PAW – towards a physics analysis workstation 45 (1987) 181

T.H. Burnett
IDA: an interactive data analysis environment for high energy physics 45 (1987) 195

E. Bassler
The graphical editor program: GEP 45 (1987) 201

D. Bertrand
The DELPHI interactive analysis and tanagra 45 (1987) 207

I. Gaines, H. Areti, R. Atac, J. Biel, A. Cook, M. Fischler, R. Hance, D. Husby, T. Nash and T. Zmuda
The ACP multiprocessor system at Fermilab 45 (1987) 323

J. Biel, H. Areti, R. Atac, A. Cook, M. Fischler, I. Gaines, C. Kaliher, R. Hance, D. Husby, T. Nash and T. Zmuda
Software for the ACP multiprocessor system 45 (1987) 331

S. Youssef
Clustering with local equivalence relations 45 (1987) 423

Data bases and data compilation

Z. Qian, S. Tang, W. Zhao, S.M. Fisher, J. Harvey, M. Boano, J. Bunn, R. McClatchey, V. Emiliani, P. Palazzi, R. Brazioli, A. Putzer, M.G. Green and R. Fantechi
Use of the ADAMO data management system within ALEPH 45 (1987) 283

R.P. Mount
Database systems for HEP experiments 45 (1987) 299

R. Lauer, A.J. Slaughter and E. Wolin
A role for relational databases in high energy physics software systems 45 (1987) 373

F. Olken, S.C. Loken, D. Rotem, A. Shoshani and T.G. Trippe
Data management for high energy physics experiments – preliminary proposals 45 (1987) 379

D. Menasce and S. Sala
The MIDA database of the E687 μstrip vertex detector 45 (1987) 385

M.F. Steuer
Monitoring of project-progress via distributed database 45 (1987) 391